

### **REMARKS**

This amendment is submitted in reply to the outstanding Office Action dated June 26, 2006. Claims 1, 3, 5-11, 14-16, 18 and 20-26 currently stand rejected and are the only pending claims in the present application. Independent claims 1, 7 and 18 have been amended to more particularly distinguish the claimed invention from the cited references. Applicants have amended claims 3, 5 and 6 to cure an informality related to antecedent basis and the scope of claims 3, 5 and 6 have not otherwise been altered. No new matter has been added by the amendment.

In light of the amendments and the remarks presented below, Applicants respectfully request reconsideration and allowance of all now-pending claims of the present application.

#### **Claim Rejections - 35 USC §112**

Claims 5 and 6 currently stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In this regard, the Office Action has asserted that the term “network device” lacks antecedent basis. Applicants have amended claims 5 and 6 to cure the cited deficiency by reciting instead --network gateway device--, which Applicants respectfully submit has proper antecedent basis.

Claims 24-26 currently also stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully traverse.

Specifically, the Office Action has indicated that the term “a conditional state” is deemed indefinite and should be clarified. Applicants submit that the term “a conditional state” is clearly defined in the specification at page 13, lines 28-32 of the application as filed. As stated in MPEP 2106 II. C., “Office personnel must rely on the applicant’s disclosure to properly determine the meaning of \*\* the claims.” *Markman v. Westview Instruments*, 52 F.3d 967, 980, 34 USPQ2d 1321, 1330 (Fed. Cir.) (*en banc*), *aff’d*, U.S., 116 S. Ct. 1384 (1996). Accordingly, the meaning

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of the term conditional state is easily ascertainable by referencing the above cited passage and therefore is not indefinite.

For all the reasons above, Applicants respectfully submit that the rejections of claims 5, 6 and 24-26 under 35 U.S.C. §112, second paragraph, are overcome.

**Claim Rejections - 35 USC §103**

**Claims 1, 3, 7-11, 16, 18, 20 and 23-26**

Claims 1, 3, 7-11, 16, 18, 20 and 23-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Merchant et al. (U.S. Patent No. 6,775,290, hereinafter "Merchant"), in view of Edsall et al. (U.S. Patent No. 5,742,604, hereinafter "Edsall"), further in view of Lau et al. (U.S. Patent No. 6,463,478, hereinafter "Lau") and further in view of Denning et al. ("Location-Based Authentication: Grounding Cyberspace for Better Security"; copyright 1996; pages 1-6, hereinafter "Denning").

**I. The cited references fail to teach or suggest querying for location information if a data packet fails to include location information.**

Independent claim 1 recites, *inter alia*, a querying agent configured to request transmission of location information associated with the plurality of port identifiers from the associated access concentrator in response to a determination that a data packet has been received that fails to include location information.

The Office Action admits, and Applicants agree, that Merchant and Edsall fail to teach or suggest the above recited feature of independent claim 1. Denning also fails to teach or suggest the above recited feature of independent claim 1 and is not cited as such. In order to cure the admitted deficiency of Merchant, Edsall and Denning, the Office Action cites Lau as disclosing the above recited feature at col. 1, line 11, to col. 3, line 32. Applicants respectfully submit that the cited passage, and indeed all of Lau, fails to teach or suggest the above recited feature.

Lau is directed to a method and apparatus for identifying runt data frames received by a network switch. As such, Applicants initially note that Lau is not a proper reference to be

combined with Merchant, Edsall and Denning since Lau is not analogous art. To rely on a reference under 35 U.S.C. §103, it must be analogous prior art. See MPEP 2141.01(a). The two-part test for analogous art requires that “the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also *State Contracting & Eng’g Corp. v. Condotte America, Inc.*, 346 F.3d 1057, 1069, 68 USPQ2d 1481, 1490 (Fed.Cir. 2003) (where the general scope of a reference is outside the pertinent field of endeavor, the reference may be considered analogous art if subject matter disclosed therein is relevant to the particular problem with which the inventor is involved). As stated above, Lau is directed to a method and apparatus for identifying runt data frames received by a network switch. The problem to be addressed in this art is to detect data frames that have runt status without any significance whatsoever attached to the location of the user. To the contrary, the claimed invention is directed to providing services responsive to the location of a user. The problem to be addressed in this art is location-based identification of data packet senders/receivers. Lau and the claimed invention are not in the same field of endeavor. Additionally, the claimed invention involves determining a location of a network user. However, Lau is unconcerned with the issue of network user location. There would be no reason for one skilled in the art of providing location-based services to look to the art of detecting runt data frames. Therefore, Lau is not reasonably pertinent to the particular problem with which the inventor was concerned. Thus, Lau is not an appropriate reference under 35 U.S.C. §103.

However, even assuming that Lau is a proper reference, Lau still fails to teach or suggest the above recited feature of independent claim 1. A careful reading of the cited passage reveals that Lau merely discloses an error correction protocol capable of requesting retransmission of individual data frames that have been lost or damaged in transit (col. 1, lines 51-57). Accordingly, Lau discloses a request for retransmission of lost or damaged frames. To the contrary, the claimed invention requests transmission of location information. Thus, Lau fails to teach or suggest any agent requesting transmission of location information as recited in independent claim 1. Furthermore, the request for retransmission of Lau is issued for frames that have been lost or damaged in transit. Meanwhile, the claimed invention recites that the querying

agent requests location information in response to a determination that a data packet has been received that fails to include location information. As such, Lau discloses retransmission of an entire frame, whereas the claimed invention requests location information if a determination is made that the data packet fails to include such information, not retransmission of the entire packet. Moreover, Lau fails to disclose any determination that a data packet fails to include location information as recited in independent claim 1. Thus, Lau fails to teach or suggest a querying agent configured to request transmission of location information associated with the plurality of port identifiers from the associated access concentrator in response to a determination that a data packet has been received that fails to include location information as claimed in independent claim 1.

Applicants respectfully note that, during a telephonic interview with the Examiner regarding this application, the Examiner asserted that Lau need not recite any connection to location information since other cited references (i.e., Merchant and/or Edsall) presumably disclose such feature. Applicants respectfully submit that the admission that Lau is unrelated to location information is yet further evidence that Lau is not analogous art. Moreover, even assuming Lau is analogous art, there is no motivation to combine Lau with the remaining references to achieve the claimed invention. In this regard, the Office Action lists passages from each of the cited references that refer to benefits associated with or problems resolved by each of the corresponding references. However, none of these cited passages provide any indication as to how any of the cited references provide motivation for a combination with the other cited references for the purpose of providing a querying agent configured to request transmission of location information associated with the plurality of port identifiers from the associated access concentrator in response to a determination that a data packet has been received that fails to include location information as claimed in independent claim 1. As such, the listed passages fail to amount to evidence of a suggestion, teaching, or motivation to combine the references. Furthermore, even assuming there would be motivation to combine the cited references, each of the cited references, individually or in combination, still fail to teach or suggest any relationship between packets that fail to include location information and a request for retransmission of the

packets. As such, if the rejection is to be maintained, Applicants respectfully request a clear articulation of which references combine to teach or suggest such feature, and in which manner.

Accordingly, since Merchant, Edsall, Lau and Denning each fail to teach or suggest a querying agent configured to request transmission of location information associated with the plurality of port identifiers from the associated access concentrator in response to a determination that a data packet has been received that fails to include location information as claimed in independent claim 1, any combination of the cited references also fails to teach or suggest the subject matter of independent claim 1. Thus, the cited references, taken either individually or in combination, do not render independent claim 1 obvious. Independent claims 7 and 18 recite similar subject matter to that of independent claim 1 with respect to querying for location information in response to receipt of data packets that fail to include location information. Accordingly, independent claims 7 and 18 are patentable for at least the same reasons given above for independent claim 1. Additionally, claims 3, 8-11, 16, 20 and 23-26 depend either directly or indirectly from one of independent claims 1, 7 and 18 and thus include all the recitations of their respective independent claims. Thus dependent claims 3, 8-11, 16, 20 and 23-26 are patentable for at least the same reasons given above for independent claims 1, 7 and 18.

Accordingly, for all of the reasons stated above, Applicants respectfully submit that the rejections of claims 1, 3, 7-11, 16, 18, 20 and 23-26 are overcome.

**II. The cited references fail to teach or suggest a location-specific connection port as claimed in the independent claims.**

Although Applicants believe the independent claims are patentable for at least the reasons stated above, there are still further reasons for the patentability of the independent claims. For example, independent claim 1 recites, *inter alia*, a processor that communicates with an access concentrator to receive a plurality of port identifiers assigned by the access concentrator wherein each port identifier is associated with a location-specific connection port. In other words, the present application discloses a method and apparatus for implementing location-based identification in a communication network. Such location-based identification is not limited to

identification of a particular address or port, as disclosed in the cited references. Rather, location-based identification identifies service recipients by their location and not just by port or address. Thus, for example, a floor of a building, a wing of a building, or an entire building may be one location in which **all ports have the same location-specific identification** (see page 10, lines 23-25).

The Office Action admits, and Applicants agree, that Merchant fails to teach or suggest the above recited feature of independent claim 1. Lau and Denning also fail to teach or suggest the above recited feature and are not cited as such. Accordingly, the Office Action cites Edsall as disclosing the above recited feature at col. 2, line 53 to col. 3, line 12, col. 3, line 46 to col. 6, line 27, col. 7, lines 45-61 and FIG. 7 of Edsall. However, Edsall merely discloses segmenting of a network such that ports of physically separated switches (e.g., in different buildings or on different floors of a building) may be associated with a virtual switch (col. 7, lines 57-61). Applicants respectfully submit that the cited passage of Edsall merely describes the association of ports at various locations with a virtual switch. However, the cited passage of Edsall is completely devoid of any teaching or suggestion that any of the ports is location-specific. In fact, to the contrary, regardless of the location of a port, the port may be associated with a virtual switch according to Edsall. Thus, there is nothing about the ports disclosed in Edsall that would even suggest location specificity. The mere fact that a switch or even a port could be in a different building or on a different floor of a building is in no way suggestive that the ports are associated with a specific location. Thus, Edsall fails to teach or suggest a processor that communicates with an access concentrator to receive a plurality of port identifiers assigned by the access concentrator wherein each port identifier is associated with a **location-specific connection port** as claimed in independent claim 1.

Since Merchant, Edsall, Lau and Denning each fail to teach or suggest a processor that communicates with an access concentrator to receive a plurality of port identifiers assigned by the access concentrator wherein each port identifier is associated with a **location-specific connection port** as claimed in independent claim 1, any combination of the cited references also fails to teach or suggest the subject matter of independent claim 1. Thus, the cited references, taken either individually or in combination, do not render independent claim 1 obvious.

Applicants respectfully submit that independent claims 7 and 18 also recite a location-specific connection port as claimed in independent claim 1. Since the cited references fail both individually and in combination to teach such feature, independent claims 7 and 18 are patentable for at least the same reasons as given above for independent claim 1. Furthermore, independent claim 7 recites, *inter alia*, that the location-specific connection ports are identified by assigning a port identifier that is mapped to a location of the connection port. A similar recitation is also found in independent claim 18. None of the cited references teach any such mapping. In particular, Merchant discloses tables for associating particular VLAN ports with particular VLAN groups (see Figures 7-9). However, Merchant fails to suggest any mapping of a port identifier to a **location** of any connection port. In fact, Merchant is silent as to the location of any of the ports. Accordingly, Merchant fails to teach or suggest that the location-specific connection ports are identified by assigning a port identifier that is mapped to a location of the connection port as claimed in independent claims 7 and 18. Applicants respectfully submit that Edsall, Lau and Denning also fail to teach or suggest the above recited feature and are not cited as such. Accordingly, the above recited feature is yet more evidence of the patentability of independent claims 7 and 18 over the cited references taken either alone or in combination.

Applicants would also respectfully note that the above traverse regarding the recitation of independent claims 7 and 18 that the location-specific connection ports are identified by assigning a port identifier that is mapped to a location of the connection port is repeated from Applicants previous response. The above traverse is repeated since the issue was not addressed in the outstanding Office Action. As stated in MPEP 707.07(f), "Where applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." Accordingly, Applicants respectfully request an answer to the substance of the traversal of the rejection of independent claims 7 and 18 in the next Office communication if such rejection is to be maintained, in accordance with the requirements of MPEP 707.07(f).

Claims 3, 8-11, 16, 20 and 23-26 depend either directly or indirectly from corresponding independent claims 1, 7 and 18, and thus include all the recitations of their corresponding

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independent claims. Dependent claims 3, 8-11, 16, 20 and 23-26 are patentable for at least the same reasons as given above for independent claims 1, 7 and 18.

Accordingly, for all the reasons stated above, Applicants respectfully submit that the rejections of claims 1, 3, 7-11, 16, 18, 20 and 23-26 are overcome.

#### Claims 5, 6, 14 and 15

Claims 5, 6, 14 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Merchant, in view of Edsall, further in view of Lau, further in view of Denning, and further in view of Hunt et al. (U.S. Patent No. 6,539,422, hereinafter "Hunt").

Although claims 5, 6, 14 and 15 are patentable at least due to their dependency from patentable independent claims since Hunt fails to cure the deficiencies identified above with respect to the independent claims, yet further reasons exist for the patentability of dependent claims 5, 6, 14 and 15. For example, Applicants continue to assert that Hunt is not a proper reference to be combined with Merchant, Edsall, Lau and Denning since Hunt is not analogous art. Applicants will not repeat the arguments previously presented in this regard, although Applicants respectfully submit that such arguments remain valid. Rather, Applicants respectfully traverse the response to Applicants' argument as presented in the outstanding Office Action. Specifically, the Office Action appears to assert that since Applicants claim an XML communication link between the network device and access concentrator, Hunt is analogous art since Hunt is directed to remotely controlling operation of networked ADC devices, such as barcode readers. Applicants respectfully submit that the mere fact that a reference includes some of the same words as dependent claims of the present application does not make that reference analogous art under the patent laws. To the contrary, Applicants submit that, for the reasons previously stated in past responses, Hunt is not analogous prior art as required by MPEP 2141.01(a) citing the patent laws.



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Accordingly, Applicants respectfully submit that the rejections of claims 5, 6, 14 and 15 are overcome.

Claims 21 and 22

Claims 21 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Merchant, in view of Edsall, in view of Lau, in view of Denning, and further in view of Hernandez et al. (U.S. Patent No. 6,208,977, hereinafter "Hernandez").

As stated above, Merchant, Edsall, Lau and Denning fail, individually and in combination, to teach or suggest a location-specific connection port as claimed in independent claim 18. There is no teaching or suggestion in Hernandez of any location-specific connection port, nor is Hernandez cited as teaching such feature. Thus, the cited references, either individually or in combination, fail to render independent claim 18 obvious. Claims 21 and 22 depend directly from independent claim 18, and thus include all the recitations of independent claim 18. Accordingly, dependent claims 21 and 22 are patentable for at least those reasons given above for independent claim 18.

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### **CONCLUSION**

In view of the amendment and the remarks submitted above, it is respectfully submitted that the present claims are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present invention.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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